

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

July 19, 2010

Rick Havenstrite Desert Hawk Gold Corporation 1290 Holcomb Ave. Reno, Nevada 89502

First Review of Notice of Intention to Commence Large Mining Operations, Desert Hawk Subject:

Gold Corporation, Kiewit Project, M/045/0078, Tooele County, Utah

Dear Mr. Havenstrite:

The Division has completed a review of your Notice of Intention to Commence Large Mining Operations for the Kiewit Project Mine, which was received February 2, 2010. As requested by the Operator, two other large mine reviews were done by the Division for the Operator, making the received date equivalent to April 14, 2010. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule headings; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using redline and strikeout text. After the notice is determined technically complete and the Division is prepared to issue final approval, we will ask that you submit two clean copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me at 801-538-5261 or Leslie Heppler, at 801-538-5257. Thank you for your cooperation in completing this permitting action.

Sincerely,

Minerals Program Manager

Lyn for PBB

PBB:lah:vs Attachment: Review

BLM - Stephen Allen@blm.gov DEQ - RHerbert@utah.gov

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FIRST REVIEW OF NOTICEOF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Desert Hawk Gold Corporation Kiewit Project M/045/00078 July 19, 2010

General Comments:

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments.	lah	
2	General	Additional comments from the Division can be generated in the future based on submittals received of the final NOI. A cover to cover review will need to be done on the final plan before it is stamped.	lah	
3	Intro para 2	DNI, formerly Dumont Nickel, has an active exploration permit, E/045/0140, at the Kiewit site. Please note this in the plan.	lah	
4	General	The quality of maps has improved, but it is the Division recommends that you refer in the text to specific maps,. For example, "the plan should state that crushing facilities will be placed as shown in figure 5	lah	

R647-4-104 - Filing Requirements and Review Procedures

Con ent	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
5	Page 2	Please note that "the Division of Oil, Gas, and Mining (DOGM) may review the permit	lah	
	para 3	and require updated information and modifications when necessary"		

R647-4-104 - Operator's, Surface and Mineral Ownership

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
6		Include the exploration permit of DNI, add the outline of the permit on Figure 3A. See comment 3 above.	lah	

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R647-4-105 - Maps, Drawings & Photographs

General Map Comments

Comm ent#	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
7	Figure 1	Add north arrow and scale.	lah	
8	Figure 2	Add acreage figures to items in the legend.	lah	
9	Fig.5	Please add the containment pond to this figure.	TM	
10	All	Show slope of pit floor to indicate how storm water will be held in the pits as noted on page 6	lah	
11	Fig. 18	The sediment pond design should include the following. The check dam should be composed of 6-24-inch rock keyed into the bed and banks two feet. Please provide a dimension for the berm so volume can be shown as described on page 5 of the SWWP. The cross-section dimensions should correspond to the 4.5-acre size averaging 8 feet deep. The center of the check dam should be lower then the sides so storm water goes over the middle of the dam. Please include a volume calculation for the structure based on the 10–year, 24-hour storm volume. The upper end of the structure should be designed so a front end loader would be able to easily clean out any build up of sediments behind the check dam.	TM	
12	Fig. SMP-2	This figure shows a containment pond 3.2 acres in size where page 5 says there will be a 4.5–acre pond.	TM	
13	Figure 3	As shown on figure 3, The Division recommends that all disturbance on BLM land be noted and marked on the surety calculation sheets as separate line items, as concurrence with the BLM will be required on all Federal ground.	lah	
14	All figure	Modify all figures to show double liner as required by DEQ.	lah	
15	Many figures	Process area is noted as 200' by 100', yet many of the drawings' dimensions are different. Please be consistent with all drawings.	lah	
16	All figures	Label all slope angles with the H:Vsuch as 2:1 should be labeled as 2H:1V.	lah	230
17	Figure 15 & 16	On Detail A and A-A' it is not clear how the compacted sub base will maintain vertical side slopes at shown.	lah	

105.1 - Topographic base map, boundaries, pre-act disturbance

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
18	Omission	The Division recommends that the operator submit a figure that details the roads, both on location and quality of road. As shown, all non documented roads will be recontoured and/or graded and reseeded.	lah	
19	Figure 7	Temporary ore stockpile and growth medium stockpile should be shown to match other figures' disturbed areas.		

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105.2 - Surface facilities map

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
20	Figure 5	A road needs to be shown to each facility and pit. Include both the length and width in	lah	
	_	the surety calculations and tie to a map.		
21	Figure 17	Include fence shown in text and in surety calculations.	lah	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

102.5 -	· Drawings	or Cross Sections (slopes, roads, pads, etc.)		
Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
22	Figure 5	Show topsoil stockpiles for all area that will be disturbed.	lah	
23	Figure 5	Show the waste dump for the Yellow Hammer pits and the initial waste dump for the Clifton Shears mine.	lah	
24	Omission	Label slope angles as either maximum or minimum as needed, as applies to rules, such as at he 1:1 slopes should be labeled as "1H:1V max". This is needed where the limits of the Division rules are applied.	lah	
25	Figure 4	Can the stratigraphic column, be scanned at a higher resolution?	lah	
26	Figure 9	Figure 9 indicates a few of the pits are less than 40 feet deep. List the depth of each pit. Address the pit in the roadway. Either provide cross section of each pit or commit on the map to maximum slope angles. The text notes that many were going to be backfilled in the Clifton Shears area, but map shows some pits remaining. It is not clear what is done at each of the various disturbances.	lah	
27	Figure 10	Much of the dump area of the existing Yellow Hammer Mine was classified (prior to recent dozing) as reclaimed by DOGM based on the variety of vegetation species that had been successfully planted.	lah	
28	Figure 10	Please correct typo in title box.	lah	
29	Figure 19	Based on the final topography shown on Figure 11, much of the Yellow Hammer Mine will need to be reseeded.	lah	
30	Figure 12 & 13	Relate figures to the base maps (Figure 13). Cross section A'-A does not match Detail A; there appears to be vertical exaggeration. Include all features and facilities in surety calculations.	lah	
31	Figure 12A	Label 2:1 as 2H:1V. In keeping with other figures, show location of two different side views as cross sections. Properly label and include in surety sheets.	lah	

105.4 - Photographs

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
32		Where is the base map for the photographs?	lah	

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R647-4-106 - Operation Plan

106.2 - Type of operations conducted, mining method, processing etc.

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review
33	Page 7	More detail is needed on why site will not have sulfide, such as depth to sulphide versus the depth/elevation of the pits. This affects bonding costs. Also include a reference location of the ore analysis in permit, such as the Appendix location	lah	
34	Omission	Nothing is noted about underground mining, either include a statement that there will be no underground workings or include the details of the underground operations as needed under each section as needed.	lah	
35	Page 7 last para	What will be done with the vertical walls at the Clifton shears mine	lah	
36	Page 8	Crushing and stacking done by the contractor is not evident on surety spreadsheet. Please include on the surety sheet.	lah	
37	Page 8 Blasting	Commit in the NOI to a minimum distance from blast zone for public road closures.	lah	
38	Page 8 Blasting	Nothing is noted on magazines or ANFO tower needed for blasting. Please include on surety spread sheet.	lah	
39	Page 8 pad	Commit in the NOI to comply with DEQ requirements for construction and operation of a cyanide leach pad.	lah	
40	Page 8 Omission	The leach pad and processing areas are located in a topographic low, in both Rodenhouse wash and several other drainages. Include a few lines in the text that refer to and summarize the SWPPP in Appendix XI. In particular address designed storm event size and diversion structures. Please note in surety calculations. Commit to revise the NOI if changes are made to the SWPPP.	lah	
41	Page 8 pad	What will be done to ensure stability at 120 ft? Is there a minimum Factor of Safety (FOS) that will be maintained? Commit in text to maintain a minimum FOS.	lah	
42	Page 9 pad	What is the frequency to monitor for major leaks? What will be done to detect for minor leaks?	lah	
43	Page 9 pond	The plan says bird netting will be used "if needed." What will determine whether bird netting will be needed? Commit in NOI to do what is needed to protect wildlife (also note under impact mitigation).	lah	
44	Page 9 pond	A detailed accounting is needed for the process facility in the surety calculations. Include carbon columns, tanks, pumps, generators, fuel storage etc.	lah	
45	Page 9 pond	The last sentence is not complete. Include location in the document for the design drawings for the pad, pond and process facilities and the narrative.	lah	
46	Page 10	Leach Pad is to be designed as per DEQ Water Quality requirements. Modify text and figures to match required design.	lah	
47	Page 10 para 3	D // 1	lah	
48	Page 10	proposed as the NOI indicates many small pits are to be mined. The Division recommends that more concurrent reclamation be done.	lah	
19		The Division 1 11 in the contract of the contr	lah	

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106.3 - Estimated acreages disturbed, reclaimed, annually

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
50	Page 11	A road needs to be shown to each facility and pit. include in the acreage figures and in the surety calculations	lah	

106.4 - Nature of materials mined, waste and estimated tonnages

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
51	Page 11 last para	What is to be done with the sulfide ore/waste if encountered?	lah	
52	Page 12 para 1	"Previous disturbance" is to be documented prior to the approval of the permit. Rewrite sentence and document the previous disturbance on the map(s).	lah	

106.5 - Existing soil types, location, amount

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
53	Page 12 Para 2	Soil report is noted to be in Appendix "VIII" and not in "Appendix 7" as listed in the text on page 12. Please correct.	lah	
54		The soils report indicates there is a significant amount of topsoil, or plant growth medium, that could and should be salvaged. It is likely that 8-12 inches (on average) could be salvaged. Using the lower figure, approximately 52,000 cu. yds. should be salvaged. At a minimum, the Division expects that at least 50,000 cu. yds be salvaged. Otherwise, a more detailed soil survey will be needed to demonstrate that the soils do not exist.	Lk	
		The lab analysis for the soils failed to report all soil parameters for the Division to fully analyze the suitability of the material for reclamation. Please provide data regarding cation exchange capacity, nitrogen (both total and nitrate nitrogen) and the percent organic matter. Without this data, the Division will assume that 10 tons/acre of biosolids or composted manure must be used as a soil amendment to improve revegetation success.	Lk	

106.7 - Existing vegetation - species and amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
55	Page 13	The vegetation survey data is not adequate. Please have a qualified biologist collect the vegetation data, which includes the percent ground cover, and a species list for each major vegetation type that will be affected by the mining operations.	Lk	

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106.8 - Depth to groundwater, extent of overburden, geology

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
56	Page 14	Commit in the text to drill and monitor the groundwater as per directed by Utah DEQ Water Quality. Obtain the necessary permits from Water Quality. Please note in surety calculations.		
57	Page 14	What will be done to assure the hydrothermally altered igneous rock will be suitable to add to the growth medium stock piles?	lah	

106.9 - Location & size of ore, waste, tailings, ponds

omment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
58	Page 15 last para	Include the total size of the overburden that will be generated, not just an annual figure. Note how much will be backfilled.	lah	
59	Page 15 last para	As written, "waste produced from this area", yet elsewhere it is noted that only the Clifton Shears will be backfilled. Exactly which pits will be backfilled and which ones will not be backfilled. What swell factor is used to determine backfill volumes?	lah	
60	Page 15 last para	Show the location of the waste piles at the Yellow Hammer on the figures. Much of the Yellow Hammer has been revegetated	lah	

R647-4-109 - Impact Assessment

109.1 - Impacts to surface & groundwater systems

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
61	Page 18	Please provide the ground water protection plan.	TM	
		Provide a place holder, in the appendix, for the necessary Ground Water Permits still to be received. Include in the Table of Contents and add all required features into the surety calculations.	lah	

109.2 - Impacts to threatened & endangered wildlife/habitat

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
62	Page 18	Mule deer are known from the area and are considered a big game species. Please correct the reference that antelope is the only big game species in the area.	Lk	

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109.4 - Slope stability, erosion control, air quality, safety

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
63	Page 20	eview MSHA regulations. As written, the statement could conflict with regulations.		
64	Page 20	Provide a place holder, in the appendix, for the necessary Air Quality Permits, to be received. Include in the Table of Contents and add all required features into the surety calculations.		
65	Page 20	As written "the crusher/equipment area" Please show location(s). Include the area in surety calculations.		
66	Page 20	Additional areas need to be fenced, and not just signed. Include in surety calculations		Judge E

R647-4-110 - Reclamation Plan

110.1 - Current & post mining land use

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
67	Page 21	Areas of historic mining that are being re-disturbed, are to reclaimed to the premining land uses of wildlife habitat and livestock grazing.	lah	

110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
68	Page 21	More information is required on the roads. Include the information on a map. The area has many old non-functional roads that don't lead anywhere. All roads to be left after mining, must have a purpose. The roads cut into the steep side slopes will be recontoured.	lah	
69	Figure 5	New haul road shown in figure 5 is to have the cross drainages reestablished during reclamation "at drainage grade" to eliminate erosion		
70	Page 21	The Division recommends that more pits are backfilled, as noted above with concurrent reclamation.		
71	Page 21	As written "the wash left to its natural state." Will Rodenhouse wash be returned to the channel it was in prior to the Kiewit operation? More importantly, what will be done to eliminate any down stream modification?		
72	Page 22	As written "A final closure plan will be proposed" Bonding is based on the worst case scenario. More details are needed on the possible options that will be implemented based on the possible water quality. As noted elsewhere, the leach pad will be managed at a pH of 11. What will be done to neutralize the pH after leaching is complete?	lah	

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110.3 - Description of facilities to be left (post mining use)

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
73	Page 22	Buildings need to be detailed in the surety calculations.	lah	

110.5 - Revegetation planting program

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
74		Rewrite replacement of growth medium section based on comments in 106.5 above regarding growth medium, soil testing, and roads to be left.	lah	

<u>R647-4-112 - Variance</u> (List all variances requested and make a finding if approving.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
75		No variances requested no further comments needed	lah	
76	Page 24-25	Note typo – sections are repeated	lah	

R647-4-113 - Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
77	Appendix XII Please provide the reclamation cost estimate in the Division's forms. The Division will provide the forms in either electronic or hard copies. In addition, please provide the Division with references for the cost to close the heap leach.		whw	

Appendix

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
78	Appendix IV	Heart permit is inactive and is not currently bonded. It is out of date	lah	
79	Appendix IV	Yellow Hammer small mine permit is missing the maps that define the disturbed areas that are bonded.	lah	